Quality Control

Work Orde June-16-14 2:25		21171		*121	1171*						Page 1
Revision ID:	D3403-3			Accept	*N900	040	100)*	Setup Star Stop	17	S1*
1	Bushing 6/16/14 6/16/14	Start Qty: 30.00 Req'd Qty: 30.00	*30* *30*		Cust Item II Customer:	D:				^IXI	S2*
Approvals:	Process Pl	an: MLJ	Date: 14-00-18	Tooling:	Da Da	te:	_	1	Run Star	~1/1	R1*
	QC:			SPC (Y/N):	Da	te:			Stop	' *N	R2*
Sequence ID/ Work Center ID)	Operation Description		Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Re	vision Nbr					·				
D3403	D										
100 *1/\n*		Hardinge CNC LATHE	SMALL	0.00				AS 2 (4	14-	J7.	7
Hardinge Hardinge CNC Lathe	e Small	Memo 1- Turn as p Folio Re 2-Deburr	per Folio FA558 & Dwg D3 v: AA_Dwg Rev:	0.00 403			94	39			
¹¹⁰ *1:1∩*		QC2- Inspect parts off m	achine FAI/FAIB	0.00				DAS A		/ · -	_
QC Qualițy Control		Memo		0.00				02 <u>3</u> 2 1-89) /5	1-07	-01
120		QC8- Inspect parts - seco	and check	0.00				_			DAS 44 9-89 (4/0
1.20 QC		Memo		0.00				30	Ø		9-89 (((

Work Order: Part No. Part No. NCR No. DISPOSITION Rework Scrap Use-as-is Suspected Unapproved Initial Cause Date Step Qty Or non-conformance Guight Handling/Pre Material Operator Offset/Setup Process Suspected Unapproved Initial Action Description Description Operator Operator Offset/Setup Process Suspected Unapproved Initial Action Description Description Operator Operator Offset/Setup Process Suspected Unapproved Initial Action Description Description Operator	DQA:			_ Date:											TOAC
DISPOSITION Rework Scrap Use as-is Skid-tube Crosstube Machining Small Fab Prod. Eng. Coor. Quality Other Composite Composit							WORK ORDER NON	-C(ONFO	RMANCE / UP			_		AEROSPACE
Rework Scrap Use-as-is Suspected Unapproved Suspected Unapproved Cause Date Step Qty Description of work order update Or non-conformance Initial Action Date Verification QC Inspector Description Date Verification QC Inspector Description Date Verification QC Inspector Description Date Description Descr	QA Closed:			Date:							W	ork Order u	odate only	- "	
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NCR No. Use-as-is Suspected Unapproved Use-as-is Large Fab Composite Supplier Other	Part N	lo.						1		⊢	 	Pro	 -	┪	
Root Cause Date Step Qty Description of work order update or non-conformance Chief Eng Description Design Doc/Data Equip/Tooling Handling/Pre Material Operator Offset/Setup Process Supplier Training Training Centre Not Concentric Cracks Cracks Cracks Crimp/Kink/Ripple/Wave Burrs Crimp/Kink/Ripple/Wave Burrs Contention Contenting Contenting Burrs Contention Contenting Burrs Contention Contenting Burrs Contention Contenting Burrs Contention Contention Contention Districtions incomplete/Unqualified Part Lost/Missing Weld Linspection Strip in Tube Drawing Misslabeled Power Loss/Surge Other Inspection Strip in Tube Drawing Misslabeled Power Loss/Surge Other Inspection Strip in Tube Drawing Misslabeled Power Loss/Surge Other		•				_	Use-as-is	1	Thern	moforming	Finishing	=			Other
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					rupe	<u> </u>	+	\vdash	-						
Training Sequence Trinish Tout of Calibration			•				-	-	4						
Wave/Twist in Tube Fit/Function Out of Sequence			_	=	e e			-	-			•			

Work Order ID 121171 *121171* June-16-14 2:25:16 PM Item ID: D3403-3 Accept *N900040100* Setup Start **Revision ID:** Stop Bushing Item Name: *NS2* *30* **Start Date:** 6/16/14 **Start Qty: 30.00 Cust Item ID:** Required Date: 6/16/14 Req'd Qty: 30.00 *30* **Customer:** Reference: Run Start Approvals: Process Plan: **Tooling:** Date: Date: Stop QC: Date: SPC (Y/N): Date: Sequence ID/ Operation Tool # Plan **Tool ID** Reject Reject Set Up/ Accept **Work Center ID** Description Qty **Run Hours** Code Qty Number Identify as per dwg & Stock Location: 130 0.00 *1'20* Packaging 0.00 Memo

140

QC21- Final Inspection - Work Order Release

0.00

140

OC

Packaging

Memo

0.00

Quality Control

Page 2

Insp.

Stamp

DAS

26

9-89

DQA: Date:								. :	TOACT			
OA Classed		D-4			WORK ORDER NON	-C(ONFO	RMANCE / UPDATE				AEROSPACE
QA Closed:		Date:					1		W	ork Order up	date only	
Work Orde	er:				DISPOSITION			AGAINS	··.			
					Rework	7		Skid-tube Crosstub	e]	Water Jet	Engineering
Part N	lo.	-			Scrap	1		Machining Small Fa	_	Pro	d. Eng. Coor.	Quality
					Use-as-is	1		noforming Finishin	\vdash	4	re/Packaging	Other
NCR N	lo				Suspected Unapproved]		Large Fab Composit	·—]	Supplier	
Root			1	Dosc	ription of work order update		Initial	Action		Sign &	•	
Cause	Date	Step	Qty	Desci	or non-conformance		nief Eng			Date	Verification	QC Inspector
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,	 	ink/Ripple	e/Wave		Burrs	<u>_</u>	4	ion Incomplete/Unqualified		Part Lost/Mi	ssing	Weld
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1	Crushing			_	Countersink	\vdash		gned/off center	<u> </u>	Positioned V		¬
	Heat Tre			<u> </u>	Cut Too Short	-	Mislabe			Power Loss/	Surge	Other
		on Strip in	Tube	<u> </u>	Drawing	<u> </u>	Misread				***	
	Marks/0			\vdash	Drill Holes	<u> </u>	Off-set					
}		Sequence		\vdash	Finish Fit / Function	-	4	Calibration				
1	11/1/21/6/11	WICE IN 1919	no		LEU / EUDCUAD		11 HIT OF 5	SOCIIONCO				

⁶ Picklist Print

June-16-14 2:25:16 PM

Page 1

Work Order ID: 121171

D3403-3

121171

Parent Item: Parent Item Name:

Bushing

D3403-3

Start Date: 6/16/14

Required Date: 6/16/14

Start Qty: 30.00

Required Qty: 30.00

Comments:

IPP Rev:A05.08.31New issueKJ/JLM

IPP Rev:B 06-03-07 As per Rev B JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch		Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M303R0.750		Purchased	No			100	f	77.1120	0.206	6.505263			
M303R0 303 Round Bar 0.750	750				•				**	02 P 1-89	- 1	1 -0	7.07

Location	Loc Qty	Loc Code
MAT028	77.112	
m127464	46.782	
m128882	0.196	
m129366	30.134	

DQA:		_ Date:		-										TOAPT
QA Closed:		Date:			WORK ORDER NON	-C(ONFO	RMANCE / UP	PDATE	۱۸/،	ork Order up	ndate only		AEROSPACE
- C103CU.		Dute.					ı				•	•		
Work Orde	er:				DISPOSITION				AGAINST	DE	PARTMENT,	/PROCESS		
					Rework]		Skid-tube	Crosstube			Water Jet		Engineering
Part N	lo				Scrap			Machining	Small Fab		Pro	d. Eng. Coor.		Quality
NCR N	lo.				Use-as-is Suspected Unapproved		Therr	noforming Large Fab	Finishing Composite	-	Rec/Stor	e/Packaging Supplier	-	Other
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Root				Desci	ription of work order update	ı	Initial	Acti			Sign &	1		
Cause	Date	Step	Qty		or non-conformance	Ch	ief Eng	Descri	ption		Date	Verification	<u> </u>	QC Inspector
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quip/Tooling	_													
Handling/Pre	_													
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ŀ	Cracks	-l./D:l-	//4/	-	Broken/Damage/Defect	-	Hardwa		سيرماندن مط	\vdash	1			Temperature/Cure
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ł	Crushing			├	Contamination Countersink	\vdash	4	cions Incomplete/U gned/off center	ndear	-	Part Moved Positioned V	Vrong		Wrong Stock Pulled
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}	Inspection Marks/Ch		rube	<u> </u>	Drill Holes	-	Off-set						—	
}	Turning S					\vdash	4	Calibration					—	
}	Wave/Tw	•		<u> </u>	Finish Fit/Function	-	-	Segrence						

Work Order:	121171
Part Number:	D3403-3
	Page 1 of 1

FIRST ARTICLE INSPECTION CHECKLIST

0.060 Ø0.257	Tolerance +0.010/-0.000 +/-0.005 +0.010/-0.000	Actual Dimension 2.170 0.061	Accept	Reject	Method of Inspection	Comments
0.060 Ø0.257	+/-0.005					
Ø0.257		0.061			our	21-4
20:21	+0.010/-0.000				mic 1"	T-1
	. 0,0 (6, 0,000	0.258				
Ø0.750	+/-0.010	0.749				
Ø0.425	+0.000/-0.002	0.4237				
Ø0.313 x 60° +/	/-0.010 x +/-0.5°	0.311				
R0.010	+/-0.010	0.010				
				<u> </u>		
	DAS		BAS			

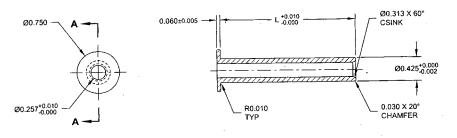
Measured by: 25 9-89 Audited by: 9-89 Preliminary Approval:

Date: 14-07-07

Date: 1407/07

Date:

		01	Revised by	Approved
Rev	Date	Change	KJ/JLM	
A	06.04.12	New Issue		
B	08.02.28	Dimensions updated	KJ/DD	
<u> </u>	11.03.08	Dimensions updated per Dwg Rev C	KJ	
<u></u>			KJ 1	7/
D	12.05.15	Dimensions updated per Dwg Rev D		1///
E	12.06.19	Dimensions updated	KJ V	



SECTION A-A

D3403-X BUSHING

DART P/N	L	WEIGHT (lbs)
D3403-1	2.416	0.07
D3403-3	2.165	0.06
D3403-5	2.440	0.07

SHOP COFY RETURN TO **ENGINEERING** UNCONTROLLED COPY SUBJECT TO AMENDMENT WITHOUT NOTICE WORK ORDER NO. 12.11.71

D		2,440 WA		XDF	11.10.28
С	REFORI D3403-5	MAT TO C	URRENT STD PER QSI 043; ADDED S +0.005/-0.000, REASON; PAR#10-02	9 MB	10.04.21
В				PH	06.01.23
A	NEW IS	SUE		PH	05.03.07
REV.			DESCRIPTION	BY	DATE
DESIGN	· T	4	DART AEROSI	ACE	LTD
DRAWN XDF		XDF	HAWKESBURY, ONTA	RIO, CAN	ADA

REV. D DRAWING NO. CHECKED SHEET 1 OF 1 D3403 MFG. APPR. SCALE APPROVED TITLE BUSHING DE APPR. COPYRIGHT © 2005 BY DART AEROSPACE LTD

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11.10.28

2) FINISH, NONE
3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
4) UNITS: INCHES UNLESS OTHERWISE NOTED

NOTES: 1) MATERIAL: AISI 303 SS ROUND BAR PER ASTM A582 REF. DART SPEC. M303R

5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX

2) FINISH: NONE

6) IDENTIFICATION: NONE

7) WEIGHT: PER TABLE

D